

REMARKS

Claims 1-31 are all of the claims currently pending in this application.

SPECIFICATION:

The Examiner asserts that the specification contains minor errors and requires that Applicants submit a substitute specification in proper idiomatic English that is in compliance with 37 C.F.R. §§1.52(a) and (b). In Section 2 of the Office Action, the Examiner cites various portions of the specification that the Examiner asserts are confusing.

Applicants respectfully submit that one skilled in the art would be able to ascertain the scope of the invention and the disclosure in light of the specification's present form. The specification uses common terms and phrases that would be acknowledged and understood by one of ordinary skill in the art. Therefore, Applicants submit herewith appropriate specification amendments rather than a substitute specification.

35 U.S.C. §112:

The Examiner rejects claims 1-31 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention.

Claims 1, 16, 21 and 24:

The Examiner asserts that the recitation of "the unrecognizable structure" is not defined properly. Applicants respectfully direct the Examiner's attention to MPEP 2173.01, where it is noted that Applicants are entitled to be their own lexicographers. That is, "they can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art." Applicants

respectfully submit that the recitation of “the unrecognizable structure” is not used in a way that is contrary to accepted meanings in the art.

Further, MPEP 2173.02 states that an essential inquiry pertaining to the terminology that satisfies 35 U.S.C. §112, second paragraph, is whether the claims set out and circumscribe the particular subject matter with a reasonable degree of clarity and particularity. In doing so, this section of the MPEP states that claim language must not be analyzed in a vacuum, but in light of, for example, the content of the particular application’s disclosure. Applicants respectfully direct the Examiner’s attention to line 3 of page 17 of the specification that discusses the unrecognizable structure. Also, as one skilled in the art would appreciate, “the unrecognizable structure” can be defined by a structure with a visual angle that is an angle formed between two lines extending respectively from both ends of an object (a bead in this case) to a viewer’s eye. Normally, an object with a visual angle of two minutes or less is almost unrecognizable by human eyes, so that “the unrecognizable structure” may be defined as an object with a visual angle of two minutes or less.

unresolvable?

Claims 1, 2, 16 and 21:

The Examiner asserts that the recitation of “a non-passing area with low light transmissivity” is not clear due to a “non-passing” area being inherently opaque and, thus, cannot have light transmission. Accordingly, Applicants hereby amend the phrase in the claims to refer to a --low-passing area-- rather than a “non-passing area.”

Claim 2:

The Examiner asserts that multiple lines of claim 2 are not clear. Therefore, Applicants hereby amend claim 2 for clarification of language.

Claims 3, 5, 6, 17, 19 and 20:

The Examiner asserts that the recitation of “forming no color and heated to form a color” is not clear. In regard to the recitation of “forms no color,” Applicants hereby amend the claims to recite a material that has “colorless” and “colored” areas.

Claims 4 and 18:

The Examiner asserts that recitations of claims 4 and 18 regarding the thermal ablative material are not clear. Accordingly, claims 4 and 18 are hereby amended for clarification of language. Applicants respectfully submit that the invention is recited in such a way that one of ordinary skill in the art would be apprised of the invention.

Claims 26-31:

The Examiner asserts that the recitations regarding a preventing sheet that prevents the scattering of extraneous light is not clear. Accordingly, claims 26-31 are also amended for clarification of language.

Claims 7-15 and 22-31:

The Examiner also asserts that claims 7-15 and 22-31 are rejected as being dependent on rejected claims. Applicants respectfully submit that the rejection of the claims, as noted hereinabove, is overcome in view of the asserted arguments and claim amendments. Thus, Applicants believe that the rejection of claims 7-15 and 22-31, based on their respective dependencies, is also overcome.

35 U.S.C. §102:

The Examiner rejects claims 1-31 under 35 U.S.C. §102(e) as being anticipated by Watanabe et al. (U.S. Patent No. 6,172,814 [hereinafter “Watanabe”]). Applicants respectfully traverse this rejection in view of the following remarks.

Claims 1, 4, 16, 18 and 21:

Rejections under 35 U.S.C. §102 are proper only when each element of the claimed subject matter is disclosed in the prior art reference. In view of the preceding claim amendments, Applicants respectfully submit that Watanabe does not disclose each element of the claimed subject matter.

Watanabe discloses a lens device that has a transparent layer 26, transparent balls 12, colored layer 13 and a further transparent layer 15. One difference between the invention of Watanabe and the present invention is the present invention's use of the passing areas and non-passing areas that are formed beneath the light transmitting spheres. In contradiction, each embodiment in Watanabe appears to show the transparent balls 12 either extending completely through the colored layer 13, or at least being positioned so as to be on the very edge of the colored layer, as shown in Figure 9, for example.

Accordingly, Applicants further define the invention to describe that the passing areas are separated by a low passing area such that portions of the passing areas and the low passing area are disposed past the spheres in a direction of the collimated light. For example, as shown in Figure 2b of the present invention, portions of the passing areas and the low-passing area are disposed past the spheres in a direction of the collimated light. That is, they are not formed to be completely aligned with the body of the spheres, as shown in Watanabe. In effect, the present invention represents channels that allow for the collimated light to travel through, after exiting the spheres.

Accordingly, Applicants respectfully submit that the recitations of claims 1, 4, 16, 18 and 21 are directed to new and unobvious light diffusing plates and display apparatuses. For example, and not by limitation, Watanabe does not disclose the recitations of claim 1 regarding the individual passing areas that respectively correspond to the light transmitting spheres that are

separated by the low passing area such that portions of the passing areas and the low passing area are disposed past the spheres in a direction of the collimated light. Applicants also respectfully submit that these recited elements provide an apparatus that has superior light diffusing efficiency, and can reduce a contrast drop that is caused by surface reflection.

*(30
103
reasons)*

In regard to claims 4 and 18, Applicants respectfully submit that the amended recitations of these claims are not taught or suggested by Watanabe because, for example, Watanabe does not teach or suggest a removed area that corresponds to the light transmitting spheres that is separated by non-removed areas, such that portions of the removed area and the non-removed areas are disposed past the spheres in a direction of the collimated light.

Moreover, in regard to claims 16 and 21, Applicants hereby amend these claims in a manner similar to claims 1, 4, 16 and 18. Applicants respectfully submit that the recitations of these claims are not taught nor suggested by Watanabe. In particular, Watanabe does not disclose passing areas, corresponding to a structure having optical refractive power, that are separated from each other by a low passing area. Further, Watanabe does not disclose that portions of passing areas and a low passing area are disposed past a structure having optical refractive power, in a direction of the collimated light.

Claims 4 and 18 are patentable over Watanabe because Watanabe fails to teach or suggest a thermal ablative layer that contains a light absorptive thermal ablative material. The Examiner does not specifically point out where Watanabe discloses such a material, but instead states that a “light absorptive thermal ablative material” is a product-by-process limitation and is not afforded patentable weight in an apparatus claim. Applicants respectfully disagree with the Examiner because these claims recite a “light absorptive thermal ablative material.” By reciting that the material is a light absorptive thermal ablative material, a particular type of material is claimed. The claim is not reciting a step of absorbing light into a material to form the invention, but

instead, is explicitly reciting the type of material that is used. A light absorptive thermal ablative material is physically different than a material that is non-light absorptive and non-thermal ablative. This is a specific element that should be afforded weight based on its physical make-up, as would be understood by one skilled in the art.

Thus, for these reasons alone, claims 4 and 18 are patentable over Watanabe for its failure to disclose the element regarding the thermal ablative layer.

Claims 3, 5, 6, 17, 19 and 20:

Applicants respectfully submit that the elements of claims 3, 5, 6, 17, 19 and 20 are not taught or suggested by Watanabe. Specifically, the claims as currently amended recite that the claimed materials contain a light sensitive material that has a “colorless” exposed area and also has a “colored” area. Watanabe does not teach or suggest the recited materials that contain both a colorless and a colored area. Instead, at best, Watanabe discloses a single color layer 13. However, this layer is not disclosed as containing a colorless area.

Moreover, Watanabe does not disclose a contacting material that contains a “light sensitive” material. Nowhere in Watanabe is the color layer 13 disclosed as being light sensitive. One skilled in the art would appreciate that a material that is light sensitive is a material that is effected by light in such a way that a change may occur in the material when acted on by light.

Even further, in regard to claims 3 and 17, Applicants respectfully submit that Watanabe does not teach a light sensitive “thermal developable material.” This recitation describes a particular material, which would be appreciated by one skilled in the art as being a material that is not only light-sensitive, but also thermal developable. Such a recitation focuses on the material itself and is different than a material that is not light sensitive or thermal developable. Although the Examiner has not directly addressed this recitation in the Office Action, it is an explicitly recited element and should be given patentable weight.

Claim 24:

Claim 24 recites, *inter alia*, an image display having a matrix structure. The Examiner does not address the recitation of the matrix structure in the present Office Action. Further, Watanabe does not disclose the use of a matrix structure as in claim 24, and cannot be used to anticipate the invention of claim 24.

CONCLUSION:

As stated above, Applicants respectfully submit that independent claims 1, 3, 4, 5, 6, 16, 17, 18, 19, 20, 21 and 24 are patentable over Watanabe because of Watanabe's failure to teach or suggest each element of the claimed subject matter. Furthermore, the claims that respectfully depend from the independent claims are also not anticipated by Watanabe at least by virtue of their respective dependencies on the independent claims, in addition to their individual recitations.

In view of the preceding amendments and remarks, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.111
U.S. SERIAL NO. 09/484,223

ART UNIT 2871
Q55890

A Petition for Extension of Time with appropriate fee accompanies this document. The USPTO is directed and authorized to charge all additional required fees (except the Issue Fee and/or the Publication Fee) to our Deposit Account No. 19-4880. Please also credit any over-payment to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Pages 6-7, bridging paragraph:

The present invention provides a light diffusing plate comprising: a light transmitting support; a diffusing layer having light transmitting spheres; and a thermal ablative layer formed between the light transmitting support and the diffusing layer[; wherein]. Wherein the thermal ablative layer which contains a light absorptive thermal ablative material[; and wherein the thermal ablative material] in an area which is illuminated by a nearly collimated light incident from a side of the diffusing layer, is removed by thermal energy by means of the nearly collimated light.

Page 8, first full paragraph:

It is also preferable that a surface of [an opposite] a side opposite to the diffusing layer in the light transmitting support is treated with light non-reflection processing.

Pages 22-23, bridging paragraph:

The light diffusing plate 16b shown in FIG. 2B has the light-sensitive material layer which is colored black, for example[, the]. The light-sensitive thermal developing material layer (hereinafter referred to simply as “color forming material layer”) 24, on which the beads 20 are fixed, [and which] forms no color in the areas (passing areas) through which the light refracted by the beads 20 passes.

Pages 23-24, bridging paragraph:

The light-sensitive material which is a positive color forming material and which forms the color forming material layer (light-sensitive thermal developing material layer which is light-sensitive material layer), for example, [the light-sensitive thermal developing material,] is a material which forms no color in the exposed area even if developed, and upon exposure[, which thereafter is]. The color forming material is then developed by heat or chemical reaction effected by heating to form a color in the non-exposed area that becomes a light shielding area (light non-passing area) and no color in the exposed area that becomes a light transmitting area (light passing area).

Page 25, fourth full paragraph:

Secondly, the beads 20 are fixed on the color forming material layer 24. For example, a paint which is the binder 25 dispersed with the beads 20 is applied thereon, or, after the binder 25 is applied[, then]. Then the beads 20 [is] are sprinkled on its entire surface; the binder 25 is dried; and the beads 20 are fixed. In this case, before the beads 20 are fixed, the beads 20 on the binder 25 may be forced to contact the color forming material layer 24 by pressing down or precipitating them in the same manner as in the previous example.

Pages 25-26, bridging paragraph:

Once the beads 20 [has] have been fixed, the collimated light from the side of beads 20, preferably the similar collimated light as that emitted from the backlight unit 14, is incident on them. In doing such [way], the light incident on the beads 20 is refracted and (together with the light not incident on the beads 20) incident on the color forming material layer 24 to expose the incident areas. Namely, only the incident areas which the light passes through in the color forming material layer 24 are exposed and [becomes] become light passing areas in which no color is formed even after [developed] development. It should be noted that [the light passing (transmitting) areas and] the area other than the light passing areas constituting the light non-passing (shielding) area is not exposed, because the light launched into the beads 20 converges on the light passing areas by the beads 20, so that the color forming material layer 24 in the light

passing areas can be exposed, but the light launched into the light non-passing area [does] is not [converge] converged by the beads 20 so that the color forming material layer 24 in the light non-passing area can not be exposed sufficiently.

Page 32, second full paragraph:

Then, by developing the color forming material layer 24 by the heat or the chemical reaction effected by heating, only the unexposed area forms a color in a high density to be a light non-passing area whereas the exposed areas forms no color to be light passing areas. In doing such [way], as shown in FIG. 3B, the diffusing plate 16d [that] having the color forming material layer 24, [which formed the] forms a high density color [in the high density] and functions as a blackmask [is produced].

Page 33, first full paragraph:

As shown in FIG. 3C, by using the thus produced diffusing plate 16d, the light bearing the image [passed] that passes through the liquid crystal panel 12 is refracted in the beads 20 and is sufficiently diffused while the color forming material layer 24, functioning as the blackmask, absorbs the extraneous light from the side of the support sheet 18 (viewer) in a substantial manner.

Page 33, second full paragraph:

Moreover, as shown in FIG. 4B, when the diffusion plate 16e is produced, firstly, the color forming material layer 24 comprising a light-sensitive material, which forms a high density color [in a high density] in the visible light range after being developed by a heat or chemical reaction, is formed on the transparent support sheet 18[, then,]. Then beads 20 are bonded on the thus formed layer using a resin having a medium density, in its light-sensitive wavelength, as a binder 30 to be fixed thereon.

Pages 33-34, bridging paragraph:

Thereafter, as shown in FIG. 4A, when the collimated light, as exposure light, is incident from the side of the beads 20, the light which is incident into the beads 20 is refracted and is then incident on areas between bottom portions of the beads 20 and the color forming material layer 24, contact areas therebetween or areas of thin portions of the binder 30 adjacent to the contact areas [of them]. Though the color forming material layer 24 in these areas has a medium density, it is thin so that the exposure light passes therethrough to sufficiently expose the color forming material layer 24 in the areas. At this time, the exposure light is also incident on the binder 30 in the area spaced among adjacent beads 20; however, since the binder 30 in this area is thick, the color forming material layer 24 thereunder is not sufficiently exposed so that it remains as an unexposed area.

Page 34, first full paragraph:

Then, by developing the color forming material layer 24 by the heat or the chemical reaction effected by heating, only the unexposed area forms a color in a high density [to be] that is a light non-passing area, whereas the exposed areas form no color [to be] such that it is a light passing area. In doing such [way], as shown in FIG. 4B, [the diffusion plate 16e in which] the color forming material layer 24 that [formed] forms color in a high density functions as a blackmask [is produced].

Page 34, second full paragraph:

As shown in FIG. 4C, by using the thus produced diffusion plate 16e, the light bearing the image which [passed] passes through the liquid crystal panel 12 is refracted in the beads 20 and is sufficiently diffused while the color forming material layer 24, functioning as the blackmask, absorbs an extraneous light from the side of the support sheet 18 (viewer) in a substantial manner.

Page 35, first full paragraph:

Namely, as shown in FIG. 5A, the layer 32 to contact the beads 20 is formed on the support sheet 18, for example, by applying the binder 22 as shown in FIG. 2A or the color forming material layer 24 as shown in FIG. 3A; then, as shown in 5B, the beads 20 are sprinkled on the entire surface of the thus formed contact layer 32[; succeedingly,]. This is succeeded by

pressing down or precipitating the beads 20 on the contact layer 32, as shown in 5C, the beads 20 are forced to contact the support sheet 18.

Page 36, second full paragraph:

The image display apparatus 40 shown in FIG. 6 is a so-called liquid crystal display (LCD) which utilizes the liquid crystal panel 12 as a display device of an image. The image display apparatus 40 comprises the liquid crystal panel 12, the backlight unit 14a which allows light to be incident on the liquid crystal panel 12, the light diffusing plate 16f which is applied on the surface of the liquid crystal panel 12 and diffuses the light that [passed] passes through the liquid crystal panel 12 and an extraneous light scattering preventing sheet 42 applied thereon. To the liquid crystal panel 12, a color filter (not shown) having a matrix structure is provided; and a drive (not shown) which drives the liquid crystal panel 12 is connected. Optionally provided to the image display apparatus 40 are various members which a known LCD has.

Page 38, third full paragraph:

The extraneous light scattering preventing sheet (hereinafter referred to simply as "preventing sheet") 42 which absorbs light and prevents the extraneous light from being scattered by decreasing light transmissivity is not limited to any particular way but is preferably treated with AR processing on its surface 42a. As the preventing sheet 42, for example, a visual

display terminal (VDT) filter mounted on a monitor of a personal computer or the like is preferably [illustrated] used.

Pages 38-39, bridging paragraph:

Take, for example, that the light transmissivity of the preventing sheet 42 is 30%, as shown by an arrow A in FIG. 8[, if]. If light passes through the preventing sheet 42 once, only 30% of an incident light (100%) [pass] passes therethrough. On the other hand, as shown by an arrow B in FIG. 8, if light is incident on the preventing sheet 42 from outside, is reflected at the beads 20 of the light diffusing plate 16f and goes out by passing through the preventing sheet 42 again, since the light passes the preventing sheet 42 twice, its transmissivity is 30% of 30%, namely, 9% ($0.3 \times 0.3 = 0.09$). Therefore, the light transmissivity of the reflected light of the extraneous light is decreased by a square of the transmissivity of the preventing sheet 42, [to be] which is extremely small and thereby effectively [preventing] prevents the extraneous light from being scattered.

Page 39, second full paragraph:

In this case, by applying the preventing sheet 42 on the light diffusing plate 16f, [it is prevented that] the extraneous light that is scattered by the beads 20 of the light diffusing plate 16f, which will cause a decrease of contrast is prevented. As a result, depixelization can be

attained without decreasing contrast, for example, when applied to a medical use, a smooth, natural image appropriate for diagnosis can be displayed on the image display apparatus.

Pages 39-40, bridging paragraph:

As described above, the extraneous light scattering preventing sheet intentionally decreases its transmissivity to reduce the influence of the extraneous light up to a square of its transmissivity so that it [has a function] functions like a face-plate of CRT. Without applying the extraneous light scattering preventing sheet on the light diffusing plate, the support sheet of the light diffusing plate may have the function of the extraneous light scattering preventing sheet. In this case, the support sheet may be prepared so as to have the light transmissivity of, for example, about 30%.

Pages 40-41, bridging paragraph:

The display apparatus of the second aspect of the present invention using such light diffusing plate of the first aspect of the present invention has an excellent light diffusing property [which a light diffusing plate has] and a preferable contrast ratio over a wide viewing angle by decreasing the reflection of the extraneous light and, as a result, is a liquid crystal display that is advantageously applicable for medical purposes.

IN THE CLAIMS:

The claims are amended as follows:

1. (Amended) A light diffusing plate comprising:
an unrecognizable structure which has an optical refractive power;
light transmitting spheres;
individual passing areas through which a collimated light incident from a side of the
unrecognizable structure passes; and
a [non-passing] low-passing area other than said passing areas, which has relatively low
light transmissivity compared with the passing areas;
wherein materials of said passing areas and [non-passing] low-passing area are applied
simultaneously[.]; and
wherein said individual passing areas respectively correspond to said light transmitting
spheres and are separated by said low-passing area, such that portions of said passing areas and a
portion of said low-passing area are disposed past said spheres in a passing direction of the
collimated light.

2. (Amended) The light diffusing plate according to claim 1, wherein the light diffusing plate comprises a light transmitting support; and a diffusing layer formed on said light transmitting support;
[by fixing light transmitting spheres which constitute said passing areas] wherein said light transmitting spheres are fixed to the light transmitting support with a light absorptive binder which constitutes a portion of said [non-passing] low-passing area.

3. (Amended) A light diffusing plate, comprising:
a light transmitting support;
a diffusing layer having light transmitting spheres; and
a light-sensitive thermal [developing] developable material layer which is formed between said light transmitting support and the diffusing layer;
wherein said light-sensitive thermal [developing] developable material layer contains a light-sensitive thermal [developing] developable material which [forms no color in an exposed] has colorless areas; and
wherein said light-sensitive thermal [developing] developable material [is heated to form a color] has colored areas formed by being heated after nearly collimated light is incident from said diffusing layer side.

4. (Amended) A light diffusing plate comprising:

a light transmitting support;

a diffusing layer having light transmitting spheres; and

a thermal ablative layer formed between said light transmitting support and the diffusing layer;

wherein the thermal ablative [which] contains a light absorptive thermal ablative material; [and]

wherein said thermal ablative material [in] has an area which is illuminated by a nearly collimated light incident from a side of said diffusing layer and is removed by thermal energy by means of the nearly collimated light[.]; and

wherein said removed area corresponds to said light transmitting spheres and is separated by non-removed areas of said thermal ablative material, such that a portion of said removed area and portions of said non-removed areas are disposed past said spheres in a direction of the collimated light.

5. (Amended) A light diffusing plate comprising:

a light transmitting support;

a diffusing layer containing light transmitting spheres; and

a contacting material which contacts said light transmitting spheres;

wherein said contacting material contains a light-sensitive material which [forms no color in an] has a colorless exposed area and a light absorptive material; and

wherein said light-sensitive material [is] also has colored areas that are formed from being heated and developed [to form a color] after nearly collimated light is incident from a side of said diffusing layer.

6. (Amended) A light diffusing plate comprising:
 - a light transmitting support;
 - a diffusing layer containing light transmitting spheres;
 - a contacting material which contacts said light transmitting spheres and contains a light absorptive material; and
 - a light-sensitive material which [forms no color in an] has a colorless exposed area and is provided between said contacting material and said light transmitting support;
 - wherein said light-sensitive material [is] also has colored areas that are formed from being heated and developed [to form a color] after nearly collimated light is incident from a side of said diffusing layer.

16. (Amended) A display apparatus comprising:

 a liquid crystal display panel;

 a backlight unit which forces a collimated light to be incident on said liquid crystal display panel; and

 a light diffusing plate which is located in an opposite side of said backlight unit against said liquid crystal display panel;

 wherein said light diffusing plate comprises an unrecognizable structure which has an optical refractive power, passing areas through which a collimated light incident from a side of the unrecognizable structure passes, and a [non-passing] low-passing area other than said passing areas, which has relatively low light transmissivity compared with the passing areas; and

 wherein materials of said passing areas and [non-passing] low-passing area are applied simultaneously[.]; and

wherein said passing areas correspond to said structure having optical refractive power and are separated from each other by said low-passing area, such that portions of said passing areas and a portion of said low-passing area are disposed past said structure having optical refractive power in a passing direction of the collimated light.

17. (Amended) A display apparatus comprising:

 a liquid crystal display panel;

 a backlight unit which forces a collimated light to be incident on said liquid crystal display panel; and

 a light diffusing plate which is located in an opposite side of said backlight unit against said liquid crystal display panel;

 wherein said light diffusing plate comprises a light transmitting support, a diffusing layer having light transmitting spheres, and a light-sensitive thermal [developing] developable material layer which is formed between said light transmitting support and the diffusing layer;

 wherein said light-sensitive thermal [developing] developable material layer contains a light-sensitive thermal [developing] developable material which [forms no color in an] has a colorless exposed area; and

 wherein said light-sensitive thermal [developing] developable material [is heated to form a color] has colored areas formed by being heated after nearly collimated light is incident from said diffusing layer side.

18. (Amended) A display apparatus comprising:

a liquid crystal display panel;

a backlight unit which forces a collimated light to be incident on said liquid crystal display panel; and

a light diffusing plate which is located in an opposite side of said backlight unit against said liquid crystal display panel;

wherein said light diffusing plate comprises a light transmitting support, a diffusing layer having light transmitting spheres, and a thermal ablative layer formed between said light transmitting support and the diffusing layer;

wherein the thermal ablative layer [which] contains a light absorptive thermal ablative material; [and]

wherein said thermal ablative material [in] has an area which is illuminated by a nearly collimated light incident from a side of said diffusing layer and is removed by thermal energy by means of the nearly collimated light; and

wherein said removed area corresponds to said light transmitting spheres and is separated by non-removed areas of said thermal ablative material, such that a portion of said removed area and portions of said non-removed areas are disposed past said spheres in a direction of the collimated light.

19. (Amended) A display apparatus comprising:

a liquid crystal display panel;

a backlight unit which forces a collimated light to be incident on said liquid crystal display panel; and

a light diffusing plate which is located in an opposite side of said backlight unit against said liquid crystal display panel;

wherein said light diffusing plate comprises a light transmitting support, a diffusing layer containing [a] light transmitting spheres, and a contacting material which contacts said light transmitting spheres;

wherein said contacting material contains a light-sensitive material which [forms no color in an] has a colorless exposed area and a light absorptive material; and

wherein said light-sensitive material [is] also has colored areas that are formed from being heated and developed [to form a color] after nearly collimated light is incident from a side of said diffusing layer.

20. (Amended) A display apparatus comprising:

a liquid crystal display panel;

a backlight unit which forces a collimated light to be incident on said liquid crystal display panel; and

a light diffusing plate which is located in an opposite side of said backlight unit against said liquid crystal display panel;

wherein said light diffusing plate comprises a light transmitting support, a diffusing layer containing light transmitting spheres, a contacting material which contacts said light transmitting spheres and contains a light absorptive material, and a light-sensitive material which [forms no color in an] has a colorless exposed area and is provided between said contacting material and said light transmitting support; and

wherein said light-sensitive material [is] also has colored areas that are formed from being heated and developed [to form a color] after nearly collimated light is incident from a side of said diffusing layer.

21. (Amended) An image display apparatus comprising:

an image display device having a matrix structure; and

a light diffusing plate comprising:

an unrecognizable structure which has an optical refractive power;

individual passing areas through which a collimated light incident from a side of the unrecognizable structure passes; and

a [non-passing] low-passing area other than said passing areas, which has relatively low light transmissivity compared with the passing areas,

wherein materials of said passing areas and [non-passing] low-passing area are applied simultaneously, [and]

wherein said light diffusing plate is provided on a viewing side of a display screen of said image display device[], and

wherein said passing areas correspond to said structure having optical refractive power and are separated from each other by said low-passing area, such that portions of said passing areas and a portion of said low-passing area are disposed past said structure having optical refractive power in a passing direction of the collimated light.

23. (Amended) The image display apparatus according to claim 21, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on said viewing side of said display screen.

26. (Amended) The image display apparatus according to claim 25, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on said viewing side of said display screen.

27. (Amended) The display apparatus according to claim 16, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on a viewing side of a display screen of said liquid crystal display panel.

28. (Amended) The display apparatus according to claim 17, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on a viewing side of a display screen of said liquid crystal display panel.

29. (Amended) The display apparatus according to claim 18, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on a viewing side of a display screen of said liquid crystal display panel.

30. (Amended) The display apparatus according to claim 19, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on a viewing side of a display screen of said liquid crystal display panel.

31. (Amended) The display apparatus according to claim 20, further comprising a preventing sheet [for preventing] which prevents extraneous light from [scattering an extraneous light] being scattered;

wherein said preventing sheet is provided on the light diffusing plate which [was] is provided on a viewing side of a display screen of said liquid crystal display panel.